

MARKED-UP VERSION OF AMENDMENTS

IN THE SPECIFICATION:

The following paragraphs have been added on these lines:

Page 1, line 7:

BACKGROUND OF THE INVENTION

Page 3, line 7:

SUMMARY OF THE INVENTION

Page 9, line 20:

BRIEF DESCRIPTION OF THE DRAWINGS

Page 9, line 35

DETAILED DESCRIPTION OF PARTICULAR EMBODIMENTS

IN THE ABSTRACT:

The abstract has been amended as follows:

In a security facility according to the invention for use as security in paper substrates, such as security and value documents, value and banknote paper and the like, said security facility (3) comprising a non-conducting plastic support (5), on which at least two conducting areas spaced apart (6) are provided, the at least two conducting areas spaced apart (6) are electrically interconnected by ~~means of~~ at least one diode connection (7) with a predefined conducting direction.

IN THE CLAIMS:

Claims 19-34 have been amended and new claim 35 has been added as follows:

19. (Amended) ~~Authenticity~~ An authenticity evaluation method of substrates having a security facility, said security facility consisting essentially of a non-conducting plastic support, on which at least two conducting areas spaced apart are provided, wherein the at least two conducting areas spaced apart of the security facility are directly electrically interconnected by means of respective connections with a predefined conduction direction, said method at least comprising the step of detecting the conducting direction of the security facility, and comparing the detected conducting direction with a reference conducting direction.

20. (Amended) ~~Authenticity~~ The authenticity evaluation method according to claim 19, comprising the further steps of measuring the size of a section of the security facility, which section has a conduction in one direction, and comparing the size thus measured with a reference size.

21. (Amended) ~~Authenticity~~ The authenticity evaluation method according to claim 19 or 20, wherein a number of conducting areas are present on the non-conducting plastic support, which are interconnected in series by means of respective diode connections with a predefined conducting direction.

22. (Amended) ~~Authenticity~~ The authenticity evaluation method according to claim 19 or 20, wherein a diode connection comprises a number of rectified, identical diodes.

23. (Amended) ~~Authenticity~~ The authenticity evaluation method according to claim 19 or 20, wherein one or more diodes of a diode connection is/are made from organic semiconductor polymers or inorganic semiconductor materials.

24. (Amended) ~~Authenticity~~ The authenticity evaluation method according to claim 19 or 20, wherein the non-conducting support is a plastic thread.

25. (Amended) ~~Authenticity~~ The authenticity evaluation method according to claim 19 or 20, wherein the security facility is selected from, a security thread or an optically variable device, a foil provided with specific optical diffraction and/or reflection such as a foil stripe.

26. (Amended) ~~Authenticity~~ The authenticity evaluation method according to claim 19 or 20, wherein the conducting areas comprise metal, these metal areas consisting of signs entirely surrounded by metal, said signs themselves being metal-free.

27. (Amended) ~~Authenticity~~ The authenticity evaluation method according to claim 19 or 20, wherein the metal of the metal areas takes the form of signs.

28. (Amended) ~~Authenticity~~ The authenticity evaluation method according to claim 26, wherein the signs form a repetitive pattern.

29. (Amended) ~~Authenticity~~ The authenticity evaluation method according to claim 19 or 20, wherein the conducting areas are made from organic conducting polymers.

30. (Amended) ~~Authenticity~~ The authenticity evaluation method according to claim 29, wherein the conducting areas comprising organic conducting polymers are printed with small

characters from a printing medium.

31. (Amended) ~~Authenticity~~ The authenticity evaluation method according to claim 19 or 20, wherein the conducting areas are constructed from organic polymers and metal.

32. (Amended) ~~Authenticity~~ The authenticity evaluation system for evaluation of the authenticity of substrates having a security facility, the system comprising:

a substrate having a security facility, which security facility consists essentially of a non-conducting plastic support, on which at least two conducting areas spaced apart are provided, wherein the at least two conducting areas spaced apart are directly electrically interconnected by means of respective diode connections with a predetermined conducting direction; and

means for detecting the conducting direction of the security facility and for comparing the detected conducting direction with a reference conducting direction.

33. (Amended) ~~Permanent~~ A permanent security facility for use as security in substrates, such as security and value documents, security, value and banknote paper and the like, in particular for use in an authenticity evaluation method according to claim 19 ~~or 20 or an authenticity evaluation system according to claim 32~~, said security facility consisting essentially of a non-conducting plastic support, on which at least two conducting areas spaced apart are provided, wherein the at least two conducting areas spaced apart are directly electrically interconnected by means of respective diode connection with a predefined conducting direction.

34. (Amended) ~~Security~~ A security paper, in particular banknote paper, comprising a permanent security facility, said permanent security facility consisting essentially of a non-

conducting plastic support, on which at least two conducting areas spaced apart are provided, wherein the at least two conducting areas spaced apart are directly electrically interconnected by means of respective diode connections with a predefined conducting direction.

35. (New) A permanent security facility for use as security in substrates, such as security and value documents, security, value and banknote paper and the like, in particular for use in an authenticity evaluation system according to claim 32, said security facility consisting essentially of a non-conducting plastic support, on which at least two conducting areas spaced apart are provided, wherein the at least two conducting areas spaced apart are directly electrically interconnected by means of respective diode connection with a predefined conducting direction.

REMARKS

By the present amendment, the specification has been amended to add section titles, the claims have been amended to add an article in the preambles, claim 32 has further been amended to modify the dependency, new claim 35 has correspondingly been added, and claim 34 has further been amended to clarify that the security facility is a permanent security facility. Support for the amendment is found in the application as filed, and in particular, is immediately derived from the detecting method of claim 16.

Claims 19-35 are pending in the present application. Independent claim 19 and dependent claims 20-32 and 35 are directed to an authenticity evaluation method of substrates having a security facility, independent claim 33 is directed to a permanent security facility for use as security in substrates, and independent claim 34 is directed to a security paper.

As a preliminary, in the Office Action, the specification, the claims, and the abstract are objected to because of the term "means" on line 7 of the abstract, the absence of section titles in the description, the lack of appropriate article in the claim preambles, and the dependency of claim 32.

The objections have been addressed as suggested in the Office Action. In particular, claim 32 has been rewritten as two distinct claims, one depending on claim 19 and the other depending on claim 32. Accordingly, it is submitted that the objections should be withdrawn.

Next, in the Office Action, claim 34 is rejected under 35 U.S.C. 102(b) as anticipated by US 4970260 to Niepolomski et al. (Niepolomski). It is alleged in the Office Action that Figs. 6-8

of Niepolomski disclose a security paper with separate conducting areas C1-Cn which are connected by diodes as disclosed at col. 3, line 8 of the document.

Reconsideration and withdrawal of the rejection is respectfully requested. Niepolomski discloses only a card including a set of "diodes that can melt" (col. 3, line 8), i.e., the diodes in the paper of Niepolomski are destroyed upon using the card. Accordingly, the card can only be used once. Further, Niepolomski is not concerned about a flow of current in a given direction, but about the ability of the diode to be destroyed upon passage of a current.

In contrast, the permanent security facility of the presently claimed invention can be checked multiple times during its normal life time due to its permanent character. This feature of the presently claimed invention and its advantages are not taught or suggested in Niepolomski, and therefore, present claim 34 is not anticipated by, and not obvious over, Niepolomski.

In view of the above, it is submitted that the rejection should be withdrawn.

In conclusion, the invention as presently claimed is patentable. It is believed that the claims are in allowable condition and a notice to that effect is earnestly requested.

In the event there is, in the Examiner's opinion, any outstanding issue and such issue may be resolved by means of a telephone interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Serial Number: 09/926,356

Group Art Unit: 2876

In the event this paper is not considered to be timely filed, the Applicants hereby petition for an appropriate extension of the response period. Please charge the fee for such extension and any other fees which may be required to our Deposit Account No. 01-2340.

Respectfully submitted,

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